

SN 09/862,855  
Docket No. S-94,652  
In Response to Office Action dated 12/27/2006

## REMARKS

### 1. STATUS INFORMATION:

Claims 1-21 were previously pending, with claims 5, 17 and 20 having been withdrawn from consideration. Claims 1, 4 and 21 are hereby cancelled. Claims 2, 3, 8, 9 and 15 are hereby amended.

### 2. REJECTIONS UNDER 35 USC 102(b), CHEHAB ET AL.

The previous 102(b) rejection of claims 2, 8-16 and 19 as being anticipated by Chehab et al., 1989, has been maintained.

Applicants had previously argued that the claimed method does not require target amplification. The Office noted, however, that *"there is nothing in claim 2 or the dependent claims that restricts the method to detection of unamplified fragments."* Accordingly, applicants have amended independent claim 2 such that the DNA or RNA containing the target is unamplified DNA or RNA.

In addition, applicants had previously argued that the claimed method is based on single-molecule detection. The Office noted, however, that there were no limitations regarding single molecule detection in the claims. Although the limitation "each" in the third and fourth listed steps of claim 2 was intended to convey illumination and detection, respectively, of individual (labeled) DNA or RNA segments, claim 2 has been further amended to replace the word "each" with the word "individual" therein, in order to clarify that the illumination and detection steps of the claimed method are applied to individual (labeled) DNA or RNA segments.

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Chehab et al. detect amplified DNA as a population of molecules that have incorporated the fluorescent labels of the amplification primers. The method of the claimed invention directly detects labeled hybridization probes bound to individual, unamplified target segments.

Accordingly, Chehab et al. do not disclose all of the limitations of the method of amended claim 2 or its dependent claims, and therefore cannot anticipate the method of amended claim 2 or its dependent claims. In view of the foregoing amendments to claim 2, applicants kindly request withdrawal of this rejection.

### **3. REJECTIONS UNDER 35 USC 102(b) AND 103(A) OVER KOSTRIKIS ET AL.**

Claims 1, 3, 4, 9-11, 15 and 16 were rejected under 35USC 102(b) as being anticipated by Kostrikis et al. In addition, claim 21 was rejected under 35 USC 103(a) as being unpatentable over Kostrikis et al.

Claims 1, 4 and 21 have been cancelled. Claim 3 has been amended to be dependent on claim 2 instead of cancelled claim 1. Claims 9 and 15 have been amended to delete dependency on cancelled claims 1 and 4, and withdrawn claim 5. The rejections have therefore been obviated.

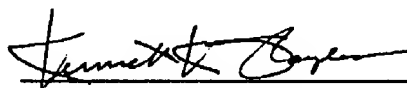
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#### 4. CONCLUSION:

Applicants submit that all rejections and objections have now been overcome or obviated, and that all claims are now free of the prior art and in condition for allowance. An indication of allowability and/or an allowance is kindly requested.

Respectfully submitted,

Date: June 27<sup>th</sup>, 2007

  
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Signature of Attorney

Reg. No. 35,355  
Phone (505) 667-0304

Kenneth K. Sharples  
Los Alamos National Laboratory  
LC/IP, MS A187  
Los Alamos, New Mexico 87545